

# School of Economics and Finance

# QUAN 203 ECONOMETRIC THEORY FOR ECONOMICS AND FINANCE

Trimester 2 2006

#### COURSE OUTLINE

#### **Contact Details**

- John Randal, RH308, phone 463-5558 (coordinator), email john.randal@vuw.ac.nz
- Jin Seo Cho, RH303, phone 463-6149, email JinSeo.Cho@vuw.ac.nz

#### Class times

- Lectures: Monday, 14:40-15:30 and Friday, 14:40-16:30, RHLT3
- Tutorial: TBA (one hour per week)

## Course Objectives

We aim to develop essential background econometric theory (including mathematics and statistics) for progression into third year econometrics and honours in econometric, economics, or finance. Assessment will test students' knowledge and appreciation of these key concepts.

#### **Course Content**

Below is a very tentative schedule for the course. 2006 is the first time this course has been offered, so it is a little experimental. Changes to the schedule will be advised via Blackboard. The main goal of the course is to enable students to be more comfortable with common mathematical and statistical ideas for further study in economics, finance, and econometrics. We intend to achieve this goal by covering the following topics:

Week	Topic
1	Introduction to probability theory
2	Discrete random variables and expectation
3	Continuous random variables and expectation
4	Expectation of functions of random variables
5	Multivariate distributions
6	Conditional random variables and expectation
Mid-trimester break (2 weeks)	
7	Matrix algebra
8	Ordinary least squares regression (OLS)
9	OLS cntd
10	Method of Moments (MM)
11	MM cntd and Maximum Likelihood Estimation (MLE)
12	MLE cntd and the GMM framework

### **Expected Workload**

A 22 point course has an expected total workload of 220 hours. Deducting the 36 lecture hours, and 11 tutorial hours, this leaves 173 hours. From this you might allocate 20 in preparation for the exam, and 10 in preparation for the term test, leaving 143. Spread over 11 weeks (weeks 2 to 12), this leaves 13 hours per week.

A suggested way of allocating this time is to spend two hours preparing for each lecture (by reviewing old material and the published lecture notes), two hours reviewing the lecture after its delivery, two hours preparing for the tutorial by attempting the problems, and the remaining time preparing the weekly assignment for submission.

### Group Work

There will be no group work for this course. All submitted assignment material must be the author's own work, and is subject to the university's Statute on Student Conduct, which in particular, forbids plagiarism.

# Readings

There are no set texts for this course, and instead, lecture notes will be provided via Blackboard. However, there are many textbooks on mathematical statistics in the library which do cover relevant material. Suggestions of good sources will be provided as the course progresses.

# Materials and Equipment

A calculator will be required for completion of this course. Any calculator used for the prerequisites of this course will be appropriate.

#### **Assessment Requirements**

Your final grade for the course will be determined by a weighted average of three components:

- regular assignments, which will be worth a maximum of 15% of your course grade
- $\bullet$  a terms test, to be held on Wednesday 6 September, 6:30-8:00pm, worth 20% of your final grade
- $\bullet$  the final examination, in the period 19 October to 11 November, worth a minimum of 65% and a maximum of 80% of your final grade

Submission of the assignments is not mandatory, but is highly recommended.

Your final grade will be

$$0.2(\text{Test}) + \max\{0.8(\text{Final}); 0.15(\text{Assignment}) + 0.65(\text{Final})\}$$

where the three component marks are in percentage terms.

In order to get an A+ in the course, at least 80% must be attained in the examination, and 85% overall.

# **Penalties**

Late assignments will not be marked (and a mark of zero awarded), unless an extension has been negotiated with the course coordinator in advance of the deadline.

#### **Mandatory Course Requirements**

Attendance at the term test is a mandatory course requirement. In order to pass the course, at least 40% must be attained in the examination, and 50% overall.

# Communication of Additional Information

Course notices will generally be relayed in class, and put on Blackboard.

#### Faculty of Commerce and Administration Offices

Railway West Wing (RWW) - FCA Student and Academic Services Office

The Faculty's Student and Academic Services Office is located on the ground and first floors of the Railway West Wing. The ground floor counter is the first point of contact for general enquiries and FCA forms. Student Administration Advisers are available to discuss course status and give further advice about FCA qualifications. To check for opening hours call the Student and Academic Services Office on (04) 463 5376.

#### Easterfield (EA) - FCA/Education/Law Kelburn Office

The Kelburn Campus Office for the Faculties of Commerce and Administration, Education and Law is situated in the Easterfield Building - it includes the ground floor reception desk (EA005) and offices 125a to 131 (Level 1). The office is available for the following:

- Duty tutors for student contact and advice.
- Information concerning administrative and academic matters.
- Forms for FCA Student and Academic Services (e.g. application for academic transcripts, requests for degree audit, COP requests).
- Examinations-related information during the examination period.

To check for opening hours call the Student and Academic Services Office on (04) 463 5376.

# General University Policies and Statutes

Students should familiarise themselves with the University's policies and statutes, particularly the Assessment Statute, the Personal Courses of Study Statute, the Statute on Student Conduct and any statutes relating to the particular qualifications being studied; see the Victoria University Calendar available in hard copy or under 'About Victoria' on the VUW home page at http://www.vuw.ac.nz/.

#### Student and Staff Conduct

The Statute on Student Conduct together with the Policy on Staff Conduct ensure that members of the University community are able to work, learn, study and participate in the academic and social aspects of the University's life in an atmosphere of safety and respect. The Statute on Student Conduct contains information on what conduct is prohibited and what steps are to be taken if there is a complaint. For information about complaint procedures under the Statute on Student Conduct, contact the Facilitator and Disputes Advisor or refer to the statute on the VUW policy website at:

http://www.vuw.ac.nz/policy/StudentConduct.

The policy on Staff Conduct can be found on the VUW website at: http://www.vuw.ac.nz/policy/StaffConduct.

# Academic Grievances

If you have any academic problems with your course you should talk to the tutor or lecturer concerned; class representatives may be able to help you in this. If you are not satisfied with the result of that meeting, see the Head of School or the relevant Associate Dean; VUWSA Education Coordinators are available to assist in this process. If, after trying the above channels, you are still unsatisfied, formal grievance procedures can be invoked. These are set out in the Academic Grievances Policy which is published on the VUW website at: http://www.vuw.ac.nz/policy/AcademicGrievances.

## Academic Integrity and Plagiarism

Academic integrity is about honesty – put simply it means **no cheating**. All members of the University community are responsible for upholding academic integrity, which means staff and students are expected to behave honestly, fairly and with respect for others at all times.

Plagiarism is a form of cheating which undermines academic integrity. The University defines plagiarism as follows:

The presentation of the work of another person or other persons as if it were one's own, whether intended or not. This includes published or unpublished work, material on the Internet and the work of other student or staff.

It is still plagiarism even if you re-structure the material or present it in your own style or words.

Note: It is however, perfectly acceptable to include the work of others as long as that is acknowledged by appropriate referencing.

Plagiarism is prohibited at Victoria and is not worth the risk. Any enrolled student found guilty of plagiarism will be subject to disciplinary procedures under the Statute on Student Conduct and may be penalised severely. Consequences of being found guilty of plagiarism can include:

- an oral or written warning
- cancellation of your mark for an assessment or a fail grade for the course
- suspension from the course or the University.

Find out more about plagiarism, and how to avoid it, on the University's website at: http://www.vuw.ac.nz/home/studying/plagiarism.html.

#### Students with Impairments

The University has a policy of reasonable accommodation of the needs of students with disabilities. The policy aims to give students with disabilities the same opportunity as other students to demonstrate their abilities. If you have a disability, impairment or chronic medical condition (temporary, permanent or recurring) that may impact on your ability to participate, learn and/or achieve in lectures and tutorials or in meeting the course requirements, please contact the Course Coordinator as early in the course as possible. Alternatively you may wish to approach a Student Adviser from Disability Support Services (DSS) to discuss your individual needs and the available options and support on a confidential basis. DSS are located on Level 1, Robert Stout Building, telephone (04) 463 6070, email disability@vuw.ac.nz. The name of your School's Disability Liaison Person is in the relevant prospectus or can be obtained from the School Office or DSS.

### Student Support

Staff at Victoria want students to have positive learning experiences at the University. Each Faculty has a designated staff member who can either help you directly if your academic progress is causing you concern, or quickly put you in contact with someone who can. Assistance for specific groups is also available from the Kaiwawao Māori, Manaaki Pihipihinga or Victoria International.

In addition, the Student Services Group (email student-services@vuw.ac.nz) is available to provide a variety of support and services. Find out more at

http://www.vuw.ac.nz/st\_services/

VUWSA employs Education Coordinators who deal with academic problems and provide support, advice and advocacy services, as well as organising class representatives and Faculty delegates. The Education Office (tel. (04) 463 6983 or (04) 463 6984, email education@vuwsa.org.nz) is located on the ground floor, Student Union Building.

# Manaaki Pihipihinga - Māori and Pacific Mentoring Programme (Faculty of Commerce and Administration)

This is a mentoring service for Māori and Pacific students studying at all levels. Weekly one hour sessions are held at the Kelburn and Pipitea Campuses in the Mentoring Rooms, 14 Kelburn Parade, and Room 210 and 211, Level 2, Railway West Wing. Sessions cover drafting and discussing assignments, essay writing, and any questions that may arise from tutorials and/or lectures. A computer suite networked to Cyber Commons is available for student use.

To register with Manaaki Pihipihinga, please contact one of the following:

Puawai Wereta Room 210, Level 2 Railway West Wing Tel. (04) 463 8997

Email: Puawai.Wereta@vuw.ac.nz

Fa'afoi Seiuli Room 109 B 14 Kelburn Parade Tel. (04) 463 5842

Email: Faafoi.Seiuli@vuw.ac.nz